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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/324,367	06/02/1999	BORA A. AKYOL	S97-047	1448

7590

09/03/2002

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EXAMINER

MAUNG, NAY AUNG

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 09/03/2002

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Remarled

Please find below and/or attached an Office communication concerning this application or proceeding.



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Office Action Summary	Application No. 09/324,367	Applicant(s) AKYOL ET AL.	
	Examiner Nay A. Maung	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Auger et al. (Auger; patent no. 6,094,425).

Consider claim 1. Auger teaches a method for frequency-time sliced resource allocation in a wireless ATM network (col. 4, lines 17-67), the method comprising: receiving on a wireless signaling channel a request for access to a shared frequency-time sliced wireless medium (col. 3, lines 34-42; fig. 2 and corresponding text to fig. 2); searching a channel matrix (fig. 2, item 20) for a set of available frequency-time slots (col. 4, lines 60-67), wherein the channel matrix represents a time frame within the shared frequency-time sliced wireless medium (fig. 2 and corresponding text to fig. 2); and allocating the set of available time-slots if the allocation does

Art Unit: 2681

not violate a frequency switching constraint (col. 4, lines 50-67, and col. 6, lines 35-55), and if the set of available frequency-time slots contains a number of slots no smaller than a requested number of slots (col. 3, lines 34-60, and col. 6, lines 38-40).

Consider claim 2. Auger further teaches wherein the searching step comprises searching a channel-chunk matrix comprising a list of contiguous chunks of available time slots in each frequency of the shared frequency-time sliced wireless medium (fig. 2 and corresponding text to fig. 2; col. 3, lines 23-35).

Consider claim 3. Auger further teaches wherein the searching step comprises searching for a set of available time slots such that all the available time slots are in a single frequency (fig. 2, items Q1-Q4, and 20).

Consider claim 4. Auger further teaches wherein the searching step comprises searching for a single contiguous set of available time slots (col. 3, lines 45-50; fig. 2 and corresponding text to fig. 2).

Consider claim 5. Auger further teaches wherein the size of the set of available slots is equal to the requested size (col. 3, lines 34-41).

Consider claim 6. Auger further teaches wherein the size of the set of available slots is greater than the requested size (fig. 2, item Q1-Q4; col. 3, lines 50-60).

Consider claim 7. Auger further teaches wherein the searching step comprises searching for a set of available slots such that the available time slots are in multiple frequencies (fig. 2, item Q1-Q4).

Consider claim 8. Auger further teaches wherein the searching step comprises a greedy resource allocation strategy (col. 6, lines 35-55).

Consider claim 9. Auger further teaches wherein the greedy resource allocation strategy comprises the following successive allocation steps: searching for a single contiguous set of available time slots in a single frequency, where the size of the set of available slots is equal to the requested size (col. 3, lines 50-60); searching for a single contiguous set of available time slots in a single frequency, where the size of the set of available slots is greater than the requested size (col. 3, lines 60 to col. 4, line 6); searching for separate chunks of available time slots in a single frequency (col. 3, lines 50-60); and searching for separate chunks of available time slots in multiple frequencies (col. 3, line 60 to col. 4, line 6).

Consider claim 10. Auger further teaches wherein each allocation step comprises checking whether the allocation violates a frequency switching constraint (col. 4, line 4-6; col. 4, lines 50-60).

Consider claim 12. Auger further teaches updating the channel matrix and transmitting a notification of allocation to a user (col. 6, lines 45-55).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Auger et al. (Auger; patent no. 6,094,425).

Art Unit: 2681

Consider claim 11. Auger teaches all of the claimed limitations as disclosed in claim 1 above, except, combining the received request with other requests and prioritizing the combined requests. However, the examiner takes "Official Notice" of the fact that is notoriously well-known in the art that prioritizing the received request in order to provide special treatment to a user with a priority.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combining the received request with other requests and prioritizing the combined requests within Auger's system such that a use with a higher priority can get the access quicker than the other user.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Besson et al. (6,381,461) discloses a method and system for transmitting data in a mobile radio network;

Tiedemann, Jr. et al. (6,317,435) recites a method and apparatus for maximizing the use of available capacity in a communication system;

Whitehead (6,295,285) discloses a global packet dynamic resource allocation for wireless networks;

Chuang et al. (6,052,594) discloses a system and method for dynamically assigning channels for wireless packet communications;

Art Unit: 2681

Bauchot (5,970,062) recites a method and apparatus for providing wireless access to an ATM network;

Raith et al. (5,818,829) discloses a method for increasing throughput capacity in a communication system;


Scholefield et al. (5,742,207) recites a method for communicating data in a wireless communication system; and

Dupont (5,535,207) discloses a method of dynamically allocating time slots on a packet data communications channel.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nay A. Maung whose telephone number is 703-308-7745. The examiner can normally be reached on 7:30 a.m. - 4:00 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on 703-305-4778. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.


NAY MAUNG
PRIMARY EXAMINER
Art Unit 2681

May 23, 2002